

interrupt service routine sends an interrupt signal to the process control system which executes a process command.

5 26. The method of claim 22 wherein the method avoids accumulation of timing variability in processing commands otherwise caused by serial timing methods.

27. A method of controlling a process for spin-coating a developer solution, the method comprising initiating two or more process commands at durations measured in parallel from one or more earlier process events, to avoid timing variabilities otherwise
10 caused by serial timing methods.

28. A spin-coating apparatus comprising a process control system to control developer solution spin-coating steps comprising initiating process commands at durations measured in parallel from one or more earlier process events.
15

29. A spin-coating apparatus comprising:
a turntable to support and rotate a substrate;
a dispenser moveable between a dispensing position and a non-dispensing position;
20 a supply of developer solution in fluid communication with the dispenser;
a process control system to control application of the developer solution onto the substrate, the process control system being programmed to interrupt serial control to execute a process command.
25

30. A spin-coating device comprising a process control system programmed to execute developer solution spin-coating processing steps comprising timing different process commands in parallel using two or more timers, to avoid accumulation of timing variability in processing commands caused by serial timing methods.
30

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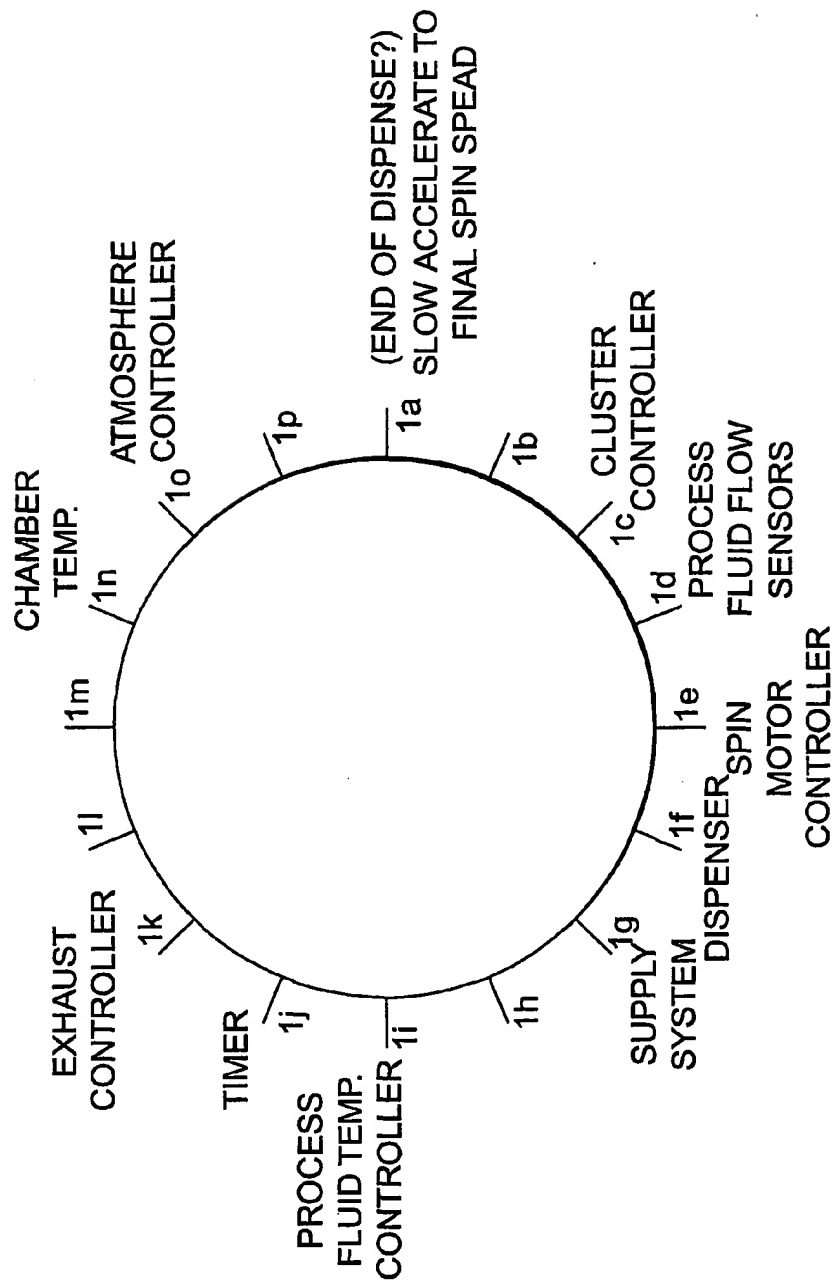


Fig. 1

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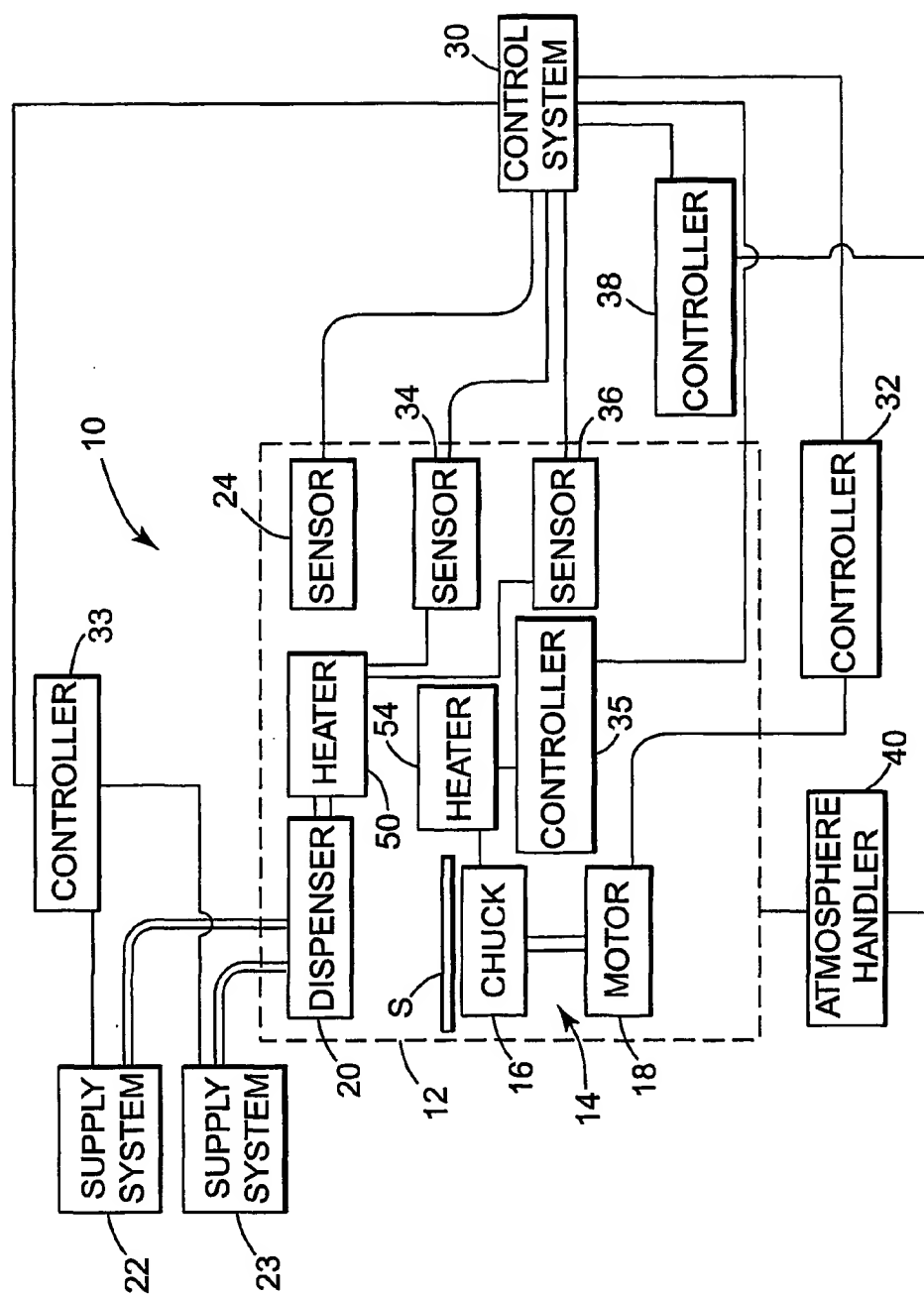


Fig. 3

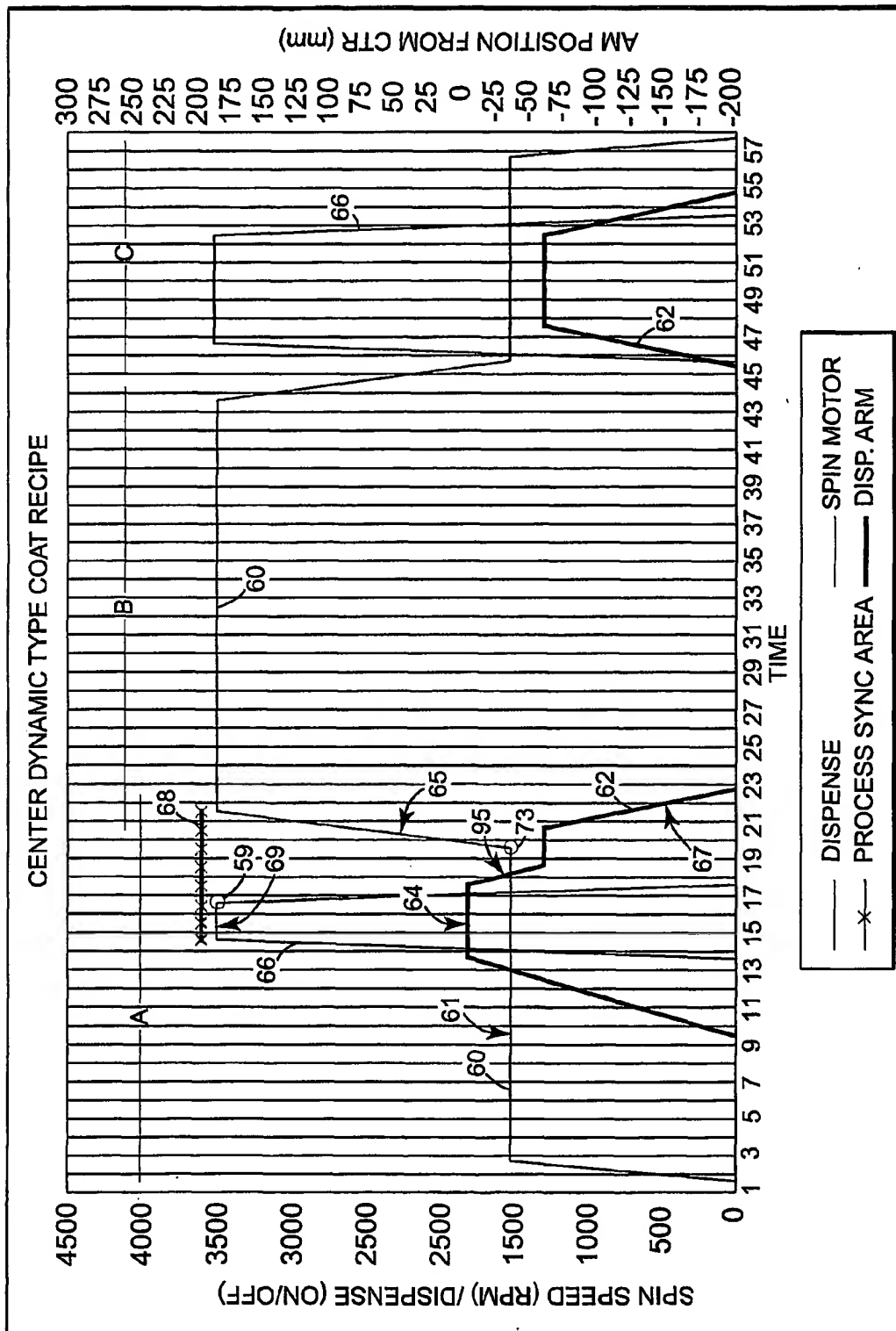


Fig. 4

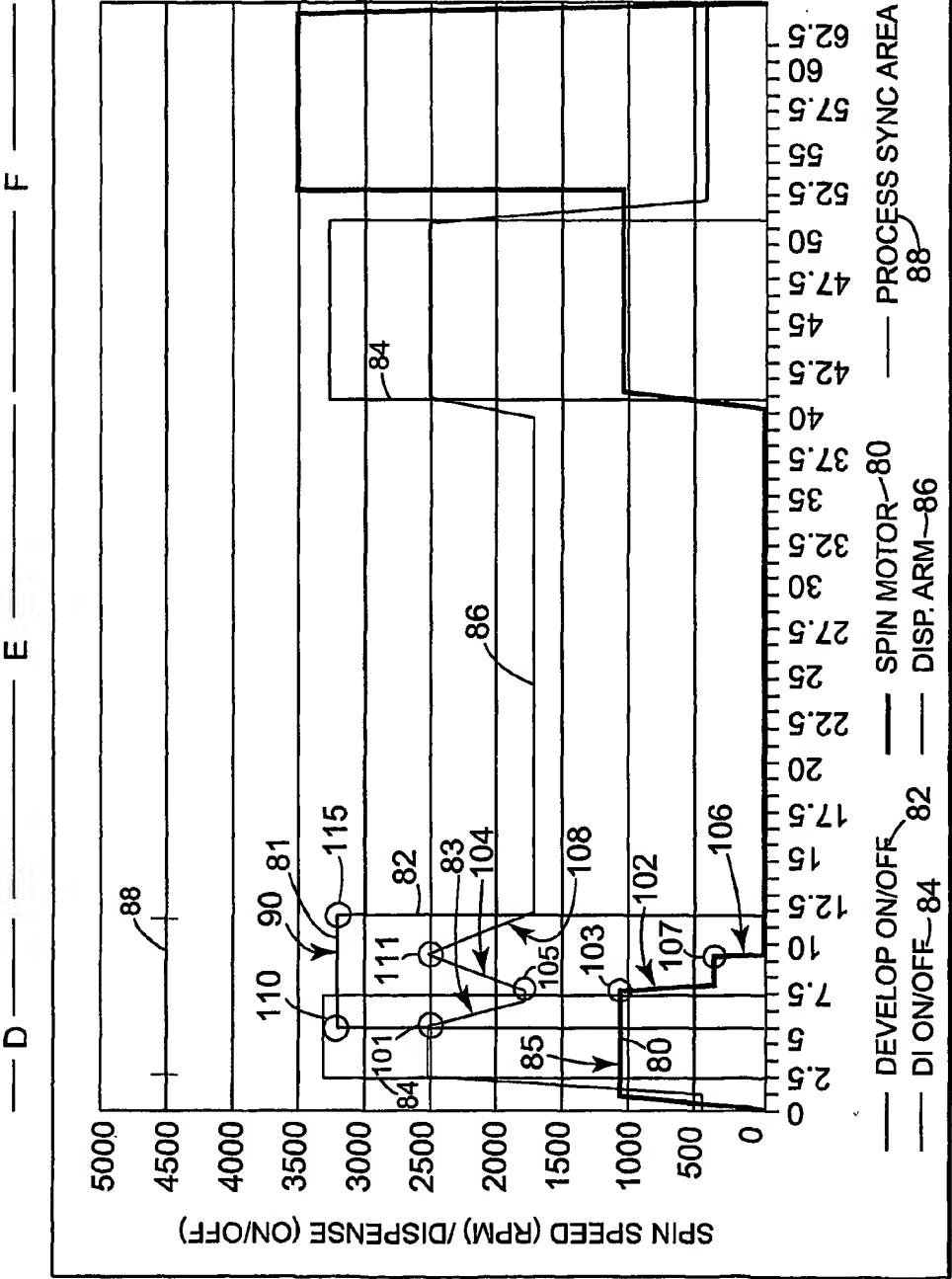


Fig. 5

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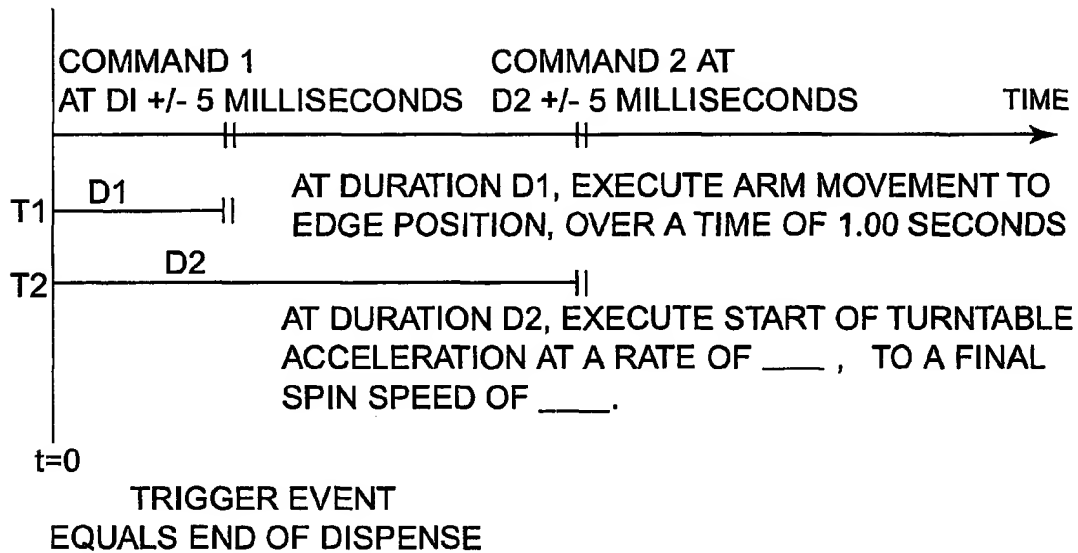


Fig. 6

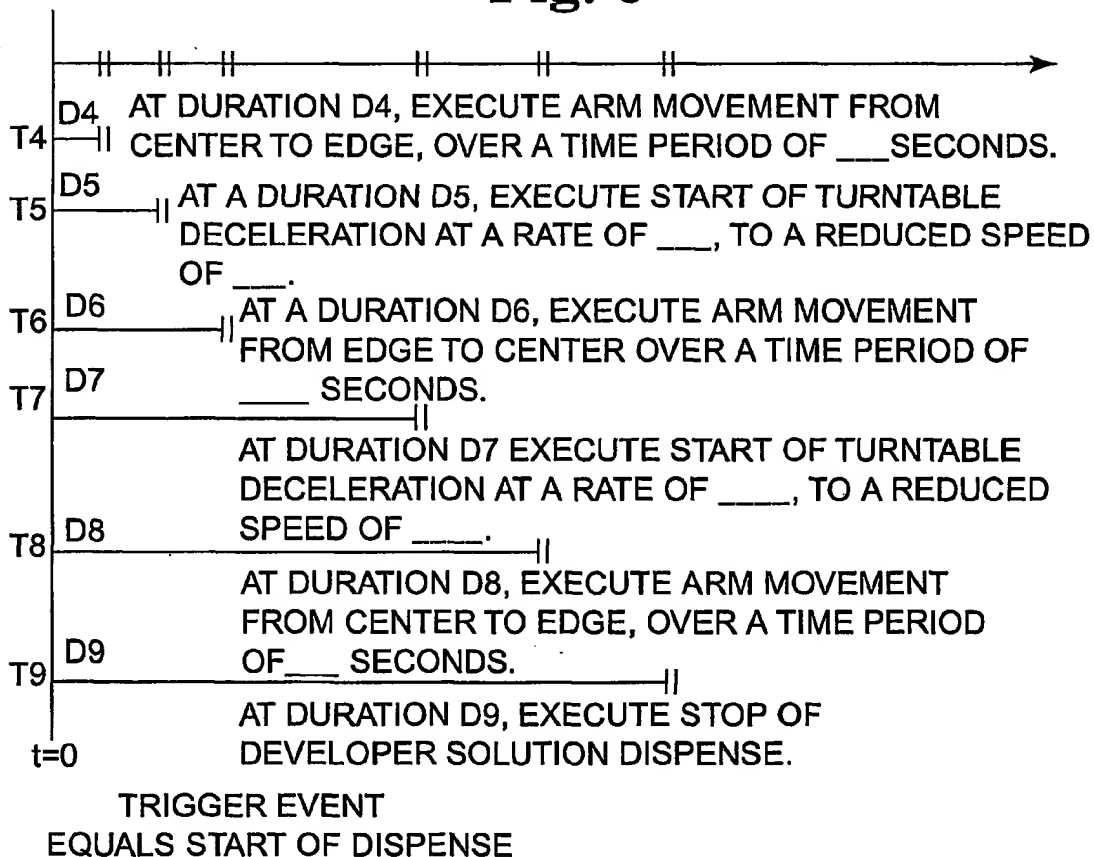
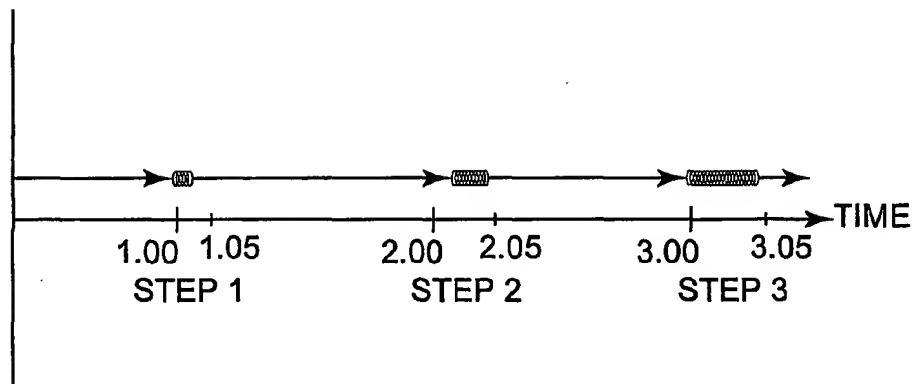
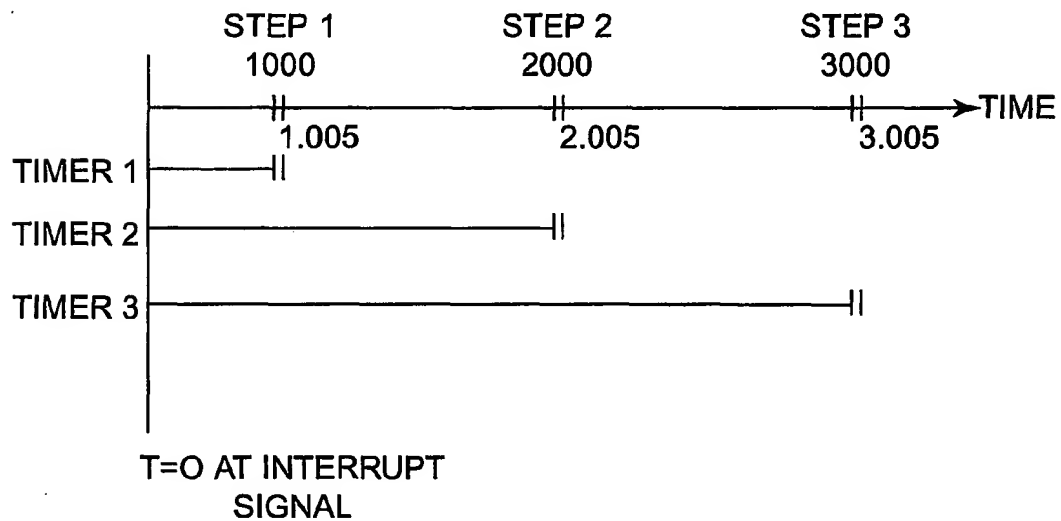


Fig. 7

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**Fig. 2****Fig. 8**

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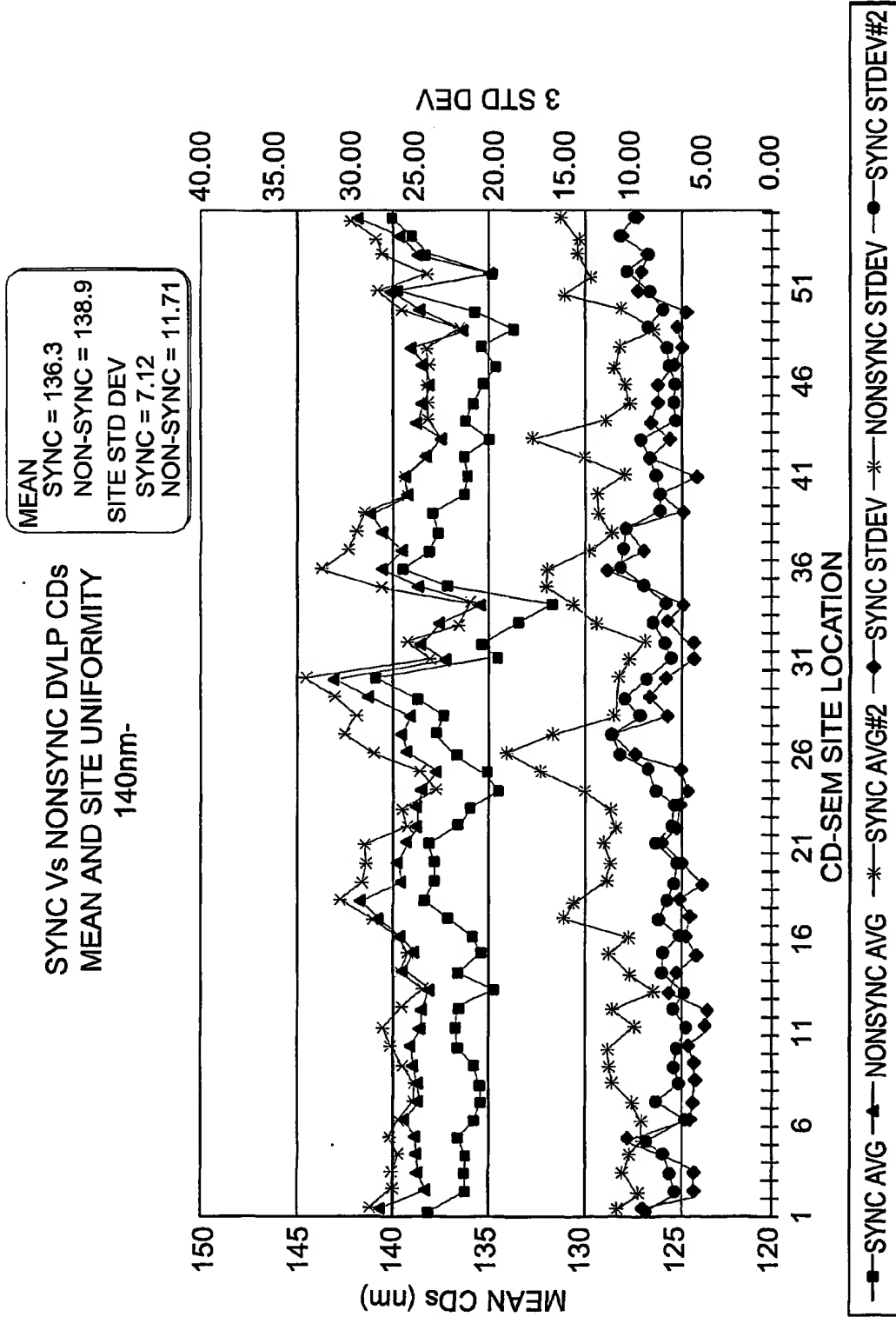


Fig. 9